Mentoring
Juvenile Justice
Benefit-cost estimates updated December 2016. Literature review updated June 2014.

Current estimates replace old estimates. Numbers will change over time as a result of model inputs and monetization methods.

The WSIPP benefit-cost analysis examines, on an apples-to-apples basis, the monetary value of programs or policies to determine whether the benefits from the program exceed its costs. WSIPP's research approach to identifying evidence-based programs and policies has three main steps. First, we determine "what works" (and what does not work) to improve outcomes using a statistical technique called meta-analysis. Second, we calculate whether the benefits of a program exceed its costs. Third, we estimate the risk of investing in a program by testing the sensitivity of our results. For more detail on our methods, see our Technical Documentation.

Program Description: Youth in the juvenile justice system are assigned to a mentor, typically a non-professional volunteer, who meets with the youth approximately once a week. Mentors help youth build social capital by engaging in pro-social relationships. Mentors assist youth in gaining access to community resources necessary for reentry (e.g., Alcoholics Anonymous), attend social functions together (e.g., movies or sporting events), and help youth engage in positive decision-making and problem-solving. Mentors typically maintain a minimum one-year commitment to the youth/program.

Studies examining the effectiveness of mentoring for youth who were not in the juvenile justice system were excluded from this review.

Benefit-Cost Summary Statistics Per Participant

Benefits to:

Taxpayers	$5,936	Benefit to cost ratio	$6.53
Participants	$1,394	Benefits minus costs	$18,022
Others	$12,648	Chance the program will produce	
Indirect	$1,305	benefits greater than the costs	87 %
Total benefits	$21,283		
Net program cost	($3,260)		
Benefits minus cost	$18,022		

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2015). The chance the benefits exceed the costs are derived from a Monte Carlo risk analysis. The details on this, as well as the economic discount rates and other relevant parameters are described in our Technical Documentation.

Detailed Monetary Benefit Estimates Per Participant

Benefits from changes to:[1]	Benefits to:				
	Participants	Taxpayers	Others[2]	Indirect[3]	Total
Crime	$0	$5,139	$12,152	$2,554	$19,845
Labor market earnings associated with high school graduation	$1,556	$707	$716	$331	$3,310
Health care associated with educational attainment	($46)	$168	($184)	$83	$21
Costs of higher education	($117)	($77)	($36)	($38)	($269)
Adjustment for deadweight cost of program	$0	$0	$0	($1,625)	($1,625)
Totals	$1,394	$5,936	$12,648	$1,305	$21,283

[1]In addition to the outcomes measured in the meta-analysis table, WSIPP measures benefits and costs estimated from other outcomes associated with those reported in the evaluation literature. For example, empirical research demonstrates that high school graduation leads to reduced crime. These associated measures provide a more complete picture of the detailed costs and benefits of the program.

[2]"Others" includes benefits to people other than taxpayers and participants. Depending on the program, it could include reductions in crime victimization, the economic benefits from a more educated workforce, and the benefits from employer-paid health insurance.

[3]"Indirect benefits" includes estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

Detailed Annual Cost Estimates Per Participant

	Annual cost	Year dollars	Summary	
Program costs	$2,748	2005	Present value of net program costs (in 2015 dollars)	($3,260)
Comparison costs	$0	2005	Cost range (+ or -)	10 %

Per-participant cost estimates are based on the Big Brothers/Big Sisters program as described in Herrera, C., Grossman, J.B., Kauh, T.J., Feldman, A.F., & McMaken, J. (2007). *Making a difference in schools: The Big Brothers Big Sisters school-based mentoring impact study*. Philadelphia, PA: Public/Private Ventures. The cost of volunteer time is based on the Office of Financial Management State Data Book average adult salary for 2012 multiplied by 1.44 to account for benefits. Cost estimates exclude donated space. In the evaluated community-based programs, mentors meet with mentees, on average, once per week over the course of one year.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The cost range reported above reflects potential variation or uncertainty in the cost estimate; more detail can be found in our Technical Documentation.

Detailed Annual Cost Estimates Per Participant
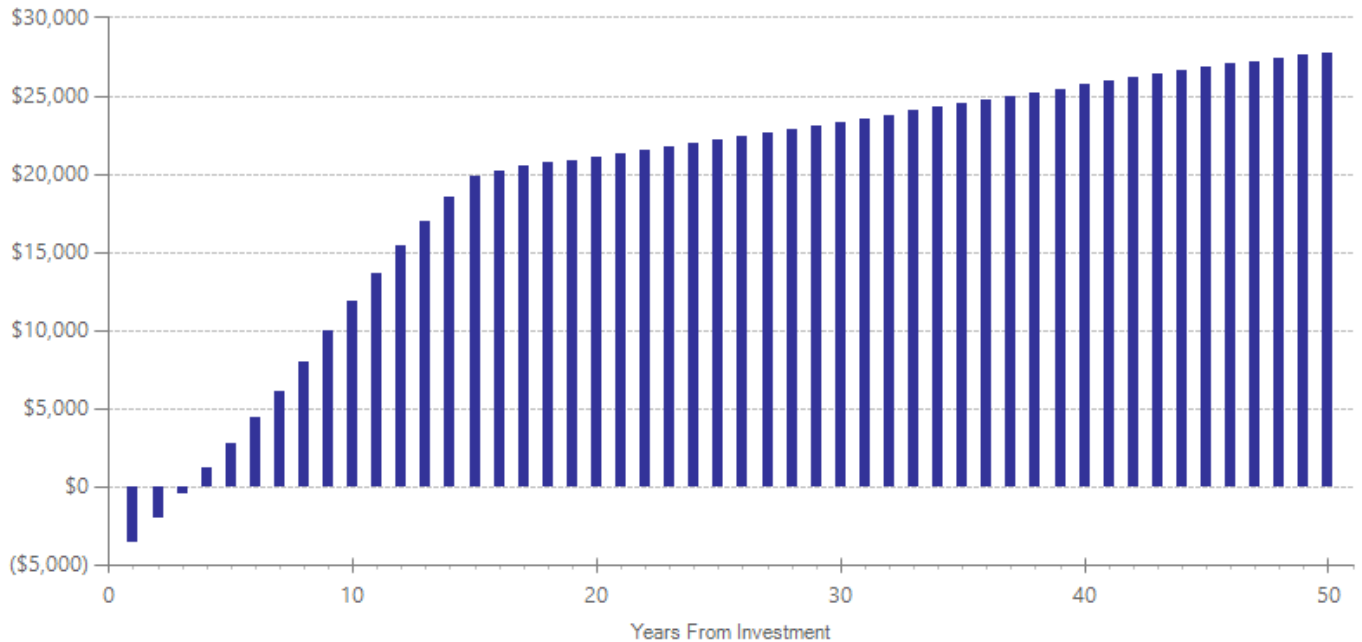
The graph above illustrates the estimated cumulative net benefits per-participant for the first fifty years beyond the initial investment in the program. We present these cash flows in non-discounted dollars to simplify the "break-even" point from a budgeting perspective. If the dollars are negative (bars below $0 line), the cumulative benefits do not outweigh the cost of the program up to that point in time. The program breaks even when the dollars reach $0. At this point, the total benefits to participants, taxpayers, and others, are equal to the cost of the program. If the dollars are above $0, the benefits of the program exceed the initial investment.

Meta-Analysis of Program Effects

Outcomes measured	No. of effect sizes	Treatment N	Adjusted effect sizes and standard errors used in the benefit-cost analysis						Unadjusted effect size (random effects model)	
			First time ES is estimated			Second time ES is estimated				
			ES	SE	Age	ES	SE	Age	ES	p-value
Crime	7	539	-0.215	0.148	18	-0.215	0.148	28	-0.327	0.044

Meta-analysis is a statistical method to combine the results from separate studies on a program, policy, or topic in order to estimate its effect on an outcome. WSIPP systematically evaluates all credible evaluations we can locate on each topic. The outcomes measured are the types of program impacts that were measured in the research literature (for example, crime or educational attainment). Treatment N represents the total number of individuals or units in the treatment group across the included studies.

An effect size (ES) is a standard metric that summarizes the degree to which a program or policy affects a measured outcome. If the effect size is positive, the outcome increases. If the effect size is negative, the outcome decreases.

Adjusted effect sizes are used to calculate the benefits from our benefit cost model. WSIPP may adjust effect sizes based on methodological characteristics of the study. For example, we may adjust effect sizes when a study has a weak research design or when the program developer is involved in the research. The magnitude of these adjustments varies depending on the topic area.

WSIPP may also adjust the second ES measurement. Research shows the magnitude of some effect sizes decrease over time. For those effect sizes, we estimate outcome-based adjustments which we apply between the first time ES is estimated and the second time ES is estimated. We also report the unadjusted effect size to show the effect sizes before any adjustments have been made. More details about these adjustments can be found in our Technical Documentation.

Citations Used in the Meta-Analysis

Blakely, C.H., Menon, R., & Jones, D.J. (1995). *Project BELONG: Final report.* College Station, TX: Texas A&M University, Public Policy Research Institute.

Bouffard, J., & Bergseth, K. (2008). The impact of reentry services on juvenile offenders' recidivism. *Youth Violence and Juvenile Justice, 6*(3), 295-318.

Drake, E., & Barnoski, R. (2006). *Recidivism findings for the Juvenile Rehabilitation Administration's mentoring program: Final report.* Olympia, WA. Washington State Institute for Public Policy.

Jarjoura, G.P. (2009). *Mentoring as a critical tool for effective juvenile reentry.* Written testimony submitted to the Congressional briefing on supporting youth reentry from out-of-home placement to the community.

Lane, J., Turner, S., Fain, T., & Sehgal, A. (2007). The effects of an experimental intensive juvenile probation program on self-reported delinquency and drug use. *Journal of Experimental Criminology, 3*(3), 201-219.

Moore, R.H. (1987). Effectiveness of citizen volunteers functioning as counselors for high-risk young male offenders. *Psychological Reports,* 61, 823-830.

O'Donnell, C.R., Lydgate, T. & Fo, W.S.O. (1979). The Buddy System: Review and follow-up. *Child Behavior Therapy,* 1, 161-169.